



# TORQ Analysis of Cost Estimators to Payroll and Timekeeping Clerks

## INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Cost Estimators	13-1051.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Payroll and Timekeeping Clerks	43-3051.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

## OUTPUT SECTION:

Grand TORQ:

91

Ability TORQ				Skills TORQ				Knowledge TORQ				
Level		<div></div> 92		Level		<div></div> 93		Level		<div></div> 87		
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add				
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt	
No Critical Gaps Recorded!				No Skills Upgrade Required!				Clerical		79	23	80

LEVEL and IMPT (IMPORTANCE) refer to the Target Payroll and Timekeeping Clerks. GAP refers to level difference between Cost Estimators and Payroll and Timekeeping Clerks.

## ASK ANALYSIS

### Ability Level Comparison - Abilities with importance scores over 50

Description	Cost Estimators	Payroll and Timekeeping Clerks	Importance
Information Ordering	60	46	75
Oral Comprehension	67	53	68
Oral Expression	67	57	68
Problem Sensitivity	50	41	68
Mathematical Reasoning	57	48	68
Deductive Reasoning	60	50	65
Near Vision	66	57	65
Written Comprehension	64	55	62
Speech Recognition	48	39	62
Speech Clarity	48	39	62
Written Expression	57	44	56
Inductive Reasoning	59	44	53
Selective Attention	37	37	53



Category Flexibility	53	41	50
Skill Level Comparison - Abilities with importance scores over 69			
Description	Cost Estimators	Payroll and Timekeeping Clerks	Importance
Time Management	65	63	83
Reading Comprehension	70	64	77
Mathematics	69	60	77
Active Listening	73	66	74
Speaking	61	61	74
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Cost Estimators	Payroll and Timekeeping Clerks	Importance
Clerical	56	79	80

Experience & Education Comparison					
Related Work Experience Comparison			Required Education Level Comparison		
Description	Cost Estimators	Payroll and Timekeeping Clerks	Description	Cost Estimators	Payroll and Timekeeping Clerks
10+ years	8%	0%	Doctoral	0%	0%
8-10 years	4%	0%	Professional Degree	0%	0%
6-8 years	9%	6%	Post-Masters Cert	0%	0%
4-6 years	4%	1%	Master's Degree	12%	0%
2-4 years	15%	32%	Post-Bachelor Cert	0%	0%
1-2 years	8%	25%	Bachelors	19%	8%
6-12 months	27%	17%	AA or Equiv	8%	3%
3-6 months	11%	5%	Some College	10%	28%
1-3 months	4%	1%	Post-Secondary Certificate	9%	16%
0-1 month	0%	0%	High School Diploma or GED	40%	41%
None	4%	10%	No HSD or GED	0%	0%
Cost Estimators			Payroll and Timekeeping Clerks		
Most Common Educational/Training Requirement:					
Work experience in a related occupation			Moderate-term on-the-job training		
Job Zone Comparison					
4 - Job Zone Four: Considerable Preparation Needed			3 - Job Zone Three: Medium Preparation Needed		
A minimum of two to four years of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.			Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.		
Most of these occupations require a four - year bachelor's degree, but some do not.			Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.		



Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

## Tasks

### Cost Estimators

#### Core Tasks

##### Generalized Work Activities:

- Communicating with Persons Outside Organization - Communicating with people outside the organization, representing the organization to customers, the public, government, and other external sources. This information can be exchanged in person, in writing, or by telephone or e-mail.
- Scheduling Work and Activities - Scheduling events, programs, and activities, as well as the work of others.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Establishing and Maintaining Interpersonal Relationships - Developing constructive and cooperative working relationships with others, and maintaining them over time.

#### Specific Tasks

##### Occupation Specific Tasks:

- Analyze blueprints and other documentation to prepare time, cost, materials, and labor estimates.
- Assess cost effectiveness of products, projects or services, tracking actual costs relative to bids as the project develops.
- Conduct special studies to develop and establish standard hour and related cost data or to effect cost reduction.
- Confer with engineers, architects, owners, contractors and subcontractors on changes and adjustments to cost estimates.
- Consult with clients, vendors, personnel in other departments or construction foremen to discuss and formulate estimates and resolve issues.
- Establish and maintain tendering process, and conduct negotiations.
- Prepare and maintain a directory of suppliers, contractors and subcontractors.
- Prepare cost and expenditure statements and other necessary documentation at regular intervals for the duration of the

### Payroll and Timekeeping Clerks

#### Core Tasks

##### Generalized Work Activities:

- Processing Information - Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information or data.
- Documenting/Recording Information - Entering, transcribing, recording, storing, or maintaining information in written or electronic/magnetic form.
- Performing Administrative Activities - Performing day-to-day administrative tasks such as maintaining information files and processing paperwork.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.

#### Specific Tasks

##### Occupation Specific Tasks:

- Compile employee time, production, and payroll data from time sheets and other records.
- Compile statistical reports, statements, and summaries related to pay and benefits accounts, and submit them to appropriate departments.
- Complete time sheets showing employees' arrival and departure times.
- Complete, verify, and process forms and documentation for administration of benefits such as pension plans, and unemployment and medical insurance.
- Compute wages and deductions, and enter data into computers.
- Coordinate special programs, such as United Way campaigns, that involve payroll deductions.
- Distribute and collect timecards each pay period.
- Issue and record adjustments to pay related to previous errors or retroactive increases.
- Keep informed about changes in tax and deduction laws that apply to the payroll process.



project.

- Prepare estimates for use in selecting vendors or subcontractors.
- Prepare estimates used by management for purposes such as planning, organizing, and scheduling work.
- Review material and labor requirements to decide whether it is more cost-effective to produce or purchase components.
- Set up cost monitoring and reporting systems and procedures.
- Visit site and record information about access, drainage and topography, and availability of services such as water and electricity.

#### Detailed Tasks

##### Detailed Work Activities:

- advise clients on financial matters
- analyze budgets
- analyze financial data
- analyze technical data, designs, or preliminary specifications
- bid engineering, construction or extraction projects
- compile data for financial reports
- compute cost estimates of construction or engineering projects
- compute financial data
- confer with vendors
- convert design specifications to cost estimates
- estimate cost for engineering projects
- estimate materials or labor requirements
- estimate production costs
- estimate time needed for project
- estimate time or cost for installation, repair, or construction projects
- evaluate material specifications
- identify supplier with best bid
- interpret maps for architecture, construction, or engineering project
- monitor operational budget
- negotiate business contracts
- prepare cost estimates
- prepare financial reports
- prepare periodic reports comparing budgeted costs to actual costs
- read blueprints
- read specifications
- understand construction specifications
- understand engineering data or reports
- understand technical operating, service or repair manuals
- use computers to enter, access and

- Post relevant work hours to client files to bill clients properly.
- Prepare and balance period-end reports, and reconcile issued payrolls to bank statements.
- Process and issue employee paychecks and statements of earnings and deductions.
- Provide information to employees and managers on payroll matters, tax issues, benefit plans, and collective agreement provisions.
- Record employee information, such as exemptions, transfers, and resignations, to maintain and update payroll records.
- Review time sheets, work charts, wage computation, and other information to detect and reconcile payroll discrepancies.
- Verify attendance, hours worked, and pay adjustments, and post information onto designated records.

#### Detailed Tasks

##### Detailed Work Activities:

- compile data for financial reports
- compute financial data
- compute taxes
- enter time sheet information
- fill out business or government forms
- maintain balance sheets
- maintain records, reports, or files
- prepare reports
- prepare tax reports
- process payroll documents, records, or checks
- reconcile or balance financial records
- use computers to enter, access or retrieve data
- use oral or written communication techniques

#### Technology - Examples

##### Accounting software

- Intuit Quicken software

##### Compliance software

- BSI ComplianceFactory

##### Data base user interface and query software

- Data entry software

- Microsoft Access

##### Electronic mail software

- Email software

- Microsoft Outlook



retrieve financial data

- use cost benefit analysis techniques
- use spreadsheet software
- use statistical cost estimation methods

#### Technology - Examples

##### Accounting software

- Choice Job Cost
- Cost accounting software
- CPR International GeneralCOST Estimator
- Intuit QuickBooks
- National Job Cost software

##### Analytical or scientific software

- Construction Management Software ProEst
- QSMSLIM
- Resources Calculations Incorporated SoftCost
- WinEstimator WinEst

##### Data base reporting software

- Business Objects Crystal Reports
- Software AG software

##### Electronic mail software

- Microsoft Outlook

##### Financial analysis software

- Cost estimation software
- CPR International Visual Estimator
- IBM Costimator
- Softstar Costar COCOMO II

##### Project management software

- Assured Software JPP
- Galorath SEER-SEM
- Sage Software Sage Master Builder
- Xactware Xactimate

##### Spreadsheet software

- Apple AppleWorks
- Corel QuattroPro
- IBM Lotus 1-2-3
- Microsoft Excel

- Novell GroupWise

##### Human resources software

- ADP Enterprise HRMS
- API Navigator
- Human Resource MicroSystems HR Entre
- Sage Software Abra HRMS

##### Internet browser software

- Netscape Navigator
- Web browser software

##### Office suite software

- Microsoft Office

##### Presentation software

- Microsoft PowerPoint

##### Spreadsheet software

- Microsoft Excel
- Spreadsheet software

##### Time accounting software

- ADP eTIME
- ADP PC/Payroll
- Automated payroll software
- Automated timekeeping software
- BMH Open4 Payroll
- CyberShift Workforce Management 3G Time and Attendance
- EBS On Line InstaPay
- Galaxy Technologies TimeStar Enterprise
- Jantek Jupiter Time Attendance
- Kronos Workforce Payroll
- Mangrove Software HR20
- Microsoft Great Plains Personal Data Keeper
- NuView EBS
- Oracle PeopleSoft Payroll for North America
- Paychex Preview
- PDS Vista
- RSM McGladrey Clear Pay



- Spreadsheet software

Word processing software

- Microsoft Word

#### Tools - Examples

- Desktop computers
- Notebook computers
- Personal computers
- Personal digital assistants PDA
- Scanners
- Tablet computers

- SAP Americas mySAP ERP Human Capital Management HCM

- TimePlus Payroll

- Ultimate Software UltiPro Workforce Management

- Unitime Systems Software

- Virtual Software Virtual Timecard

- WorkForce Software EmpCenter Time and Attendance

Word processing software

- Microsoft Word

- Word processing software

#### Tools - Examples

- 10-key calculators
- Desktop computers
- Computer terminals
- Personal computers

## Labor Market Comparison

Description	Cost Estimators	Payroll and Timekeeping Clerks	Difference
Median Wage	\$ 44,990	\$ 30,470	\$( 14,520)
10th Percentile Wage	\$ 30,880	\$ 22,470	\$( 8,410)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 58,820	\$ 35,970	\$( 22,850)
90th Percentile Wage	\$ 76,320	\$ 40,700	\$( 35,620)
Mean Wage	\$ 49,830	\$ 31,260	\$( 18,570)
Total Employment - 2007	750	650	-100
Employment Base - 2006	751	672	-79
Projected Employment - 2016	853	649	-204
Projected Job Growth - 2006-2016	13.6 %	-3.4 %	-17.0 %
Projected Annual Openings - 2006-2016	25	17	-8

## National Job Posting Trends

Trend for Cost Estimators

Trend for  
Payroll and  
Timekeeping  
Clerks



Data from [Indeed](http://Indeed.com)

### Recommended Programs

#### Accounting Technician

Accounting Technology/Technician and Bookkeeping. A program that prepares individuals to provide technical administrative support to professional accountants and other financial management personnel. Includes instruction in posting transactions to accounts, record-keeping systems, accounting software operation, and general accounting principles and practices.

Institution	Address	City	URL
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
Kennebec Valley Community College	92 Western Ave	Fairfield	<a href="http://www.kvcc.me.edu">www.kvcc.me.edu</a>
University of Maine at Machias	9 O'Brien Ave	Machias	<a href="http://www.umm.maine.edu">www.umm.maine.edu</a>
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>

### Maine Statewide Promotion Opportunities for Cost Estimators

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
13-1051.00	Cost Estimators	100	4	750	\$44,990.00	\$0.00	14%	25
13-1023.00	Purchasing Agents, Except Wholesale, Retail, and Farm Products	93	3	920	\$45,210.00	\$220.00	-2%	21
19-3021.00	Market Research Analysts	90	4	200	\$49,960.00	\$4,970.00	3%	2
13-2053.00	Insurance Underwriters	90	3	460	\$56,090.00	\$11,100.00	-1%	12



41-1012.00	First-Line Supervisors/Managers of Non-Retail Sales Workers	89	4	930	\$55,220.00	\$10,230.00	-1%	19
41-3031.02	Sales Agents, Financial Services	89	4	0	\$65,230.00	\$20,240.00	5%	33
11-3031.02	Financial Managers, Branch or Department	89	4	2,440	\$67,670.00	\$22,680.00	7%	58
13-2031.00	Budget Analysts	89	4	170	\$57,290.00	\$12,300.00	3%	5
11-2022.00	Sales Managers	88	4	1,310	\$72,720.00	\$27,730.00	3%	32
13-2011.02	Auditors	88	4	3,250	\$48,110.00	\$3,120.00	11%	113
41-3031.01	Sales Agents, Securities and Commodities	88	4	0	\$65,230.00	\$20,240.00	5%	33
41-9021.00	Real Estate Brokers	88	3	320	\$61,300.00	\$16,310.00	-1%	22
13-2052.00	Personal Financial Advisors	88	3	360	\$94,100.00	\$49,110.00	10%	13
13-2072.00	Loan Officers	88	3	1,450	\$49,380.00	\$4,390.00	9%	29
11-3011.00	Administrative Services Managers	88	4	1,090	\$56,630.00	\$11,640.00	5%	34

### Top Industries for Payroll and Timekeeping Clerks

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Accounting, tax preparation, bookkeeping, and payroll services	541200	8.45%	18,059	23,560	30.46%
Management of companies and enterprises	551100	5.64%	12,037	12,489	3.75%
Local government, excluding education and hospitals	939300	5.51%	11,780	11,910	1.10%
Employment services	561300	4.85%	10,350	11,790	13.91%
Elementary and secondary schools, public and private	611100	4.67%	9,971	9,457	-5.16%
General medical and surgical hospitals, public and private	622100	2.25%	4,805	4,788	-0.36%
Automobile dealers	441100	2.21%	4,730	4,830	2.10%
Nursing care facilities	623100	2.13%	4,543	4,444	-2.19%
Plumbing, heating, and air-conditioning contractors	238220	1.61%	3,441	3,497	1.63%
Federal government, excluding postal service	919999	1.57%	3,355	2,855	-14.92%
Colleges, universities, and professional schools, public and private	611300	1.48%	3,152	3,173	0.69%
Electrical contractors	238210	1.43%	3,053	2,881	-5.63%
General freight trucking	484100	1.29%	2,750	2,800	1.80%



Other specialty trade contractors	238900	1.27%	2,711	2,697	-0.53%
Nonresidential building construction	236200	1.26%	2,700	2,723	0.84%

### Top Industries for Cost Estimators

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Nonresidential building construction	236200	9.42%	20,828	25,214	21.06%
Residential building construction	236100	8.88%	19,639	23,893	21.66%
Plumbing, heating, and air-conditioning contractors	238220	7.50%	16,592	20,243	22.00%
Electrical contractors	238210	7.22%	15,964	18,085	13.29%
Other specialty trade contractors	238900	5.27%	11,641	13,900	19.41%
Automotive body, paint, interior, and glass repair	811120	3.78%	8,358	10,543	26.14%
Drywall and insulation contractors	238310	3.11%	6,882	7,931	15.24%
Printing and related support activities	323100	2.68%	5,921	5,068	-14.40%
Architectural and structural metals manufacturing	332300	2.56%	5,662	6,533	15.39%
Roofing contractors	238160	2.41%	5,338	6,735	26.16%
Highway, street, and bridge construction	237300	2.38%	5,266	6,125	16.32%
Painting and wall covering contractors	238320	2.03%	4,489	5,397	20.22%
Building material and supplies dealers	444100	1.92%	4,252	5,870	38.06%
Automobile dealers	441100	1.49%	3,290	4,032	22.56%
Poured concrete foundation and structure contractors	238110	1.46%	3,228	3,932	21.79%